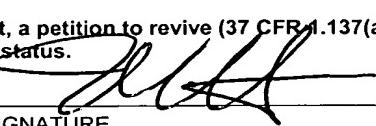


FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE [REV. 2-26-03]		ATTORNEY'S DOCKET NUMBER <b>428.1056</b>
<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		U.S. APPLICATION NO. (If known, see 37 CFR 1.5) <b>10/551508</b>
INTERNATIONAL APPLICATION NO. <b>PCT/KR2004/000752</b>	INTERNATIONAL FILING DATE <b>31 March 2004</b>	PRIORITY DATE CLAIMED <b>31 March 2003</b>
<b>TITLE OF INVENTION</b> <b>GENE INVOLVED IN THE BIOSYNTHESIS OF CAROTENOID AND MARINE MICROORGANISM, PARACOCCUS HAEUNDAENSIS, PRODUCING THE CAROTENOID</b>		
<b>APPLICANT(S) FOR DO/EO/US</b> <b>KIM, Young Tae and LEE, Jae Hyung</b>		
<p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</p> <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.</li> <li>4. <input checked="" type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2))             <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).</li> <li>11. <input type="checkbox"/> A copy of the International Preliminary Examination Report (PCT/IPEA/409).</li> <li>12. <input checked="" type="checkbox"/> A copy of the International Search Report (PCT/ISA/210).</li> </ol> <p><b>Items 13 to 23 below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li>13. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</li> <li>14. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>15. <input checked="" type="checkbox"/> A <b>FIRST</b> preliminary amendment.</li> <li>16. <input type="checkbox"/> A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment.</li> <li>17. <input type="checkbox"/> A substitute specification.</li> <li>18. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>19. <input checked="" type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.</li> <li>20. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>21. <input type="checkbox"/> A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).</li> <li>22. <input checked="" type="checkbox"/> Express Mail Label No. <b>EV 733 807 363 US</b></li> <li>23. <input checked="" type="checkbox"/> Other items or information: <b>Acknowledgement Postcard</b></li> </ol>		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO (if known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
<b>10/551508</b>		<b>PCT/KR2004/000752</b>		<b>428.1056</b>
The following fees are submitted:				
24. <input checked="" type="checkbox"/> Basic national fee .....		\$300	CALCULATIONS PTO USE	
25. <input checked="" type="checkbox"/> Examination fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4). ....		\$100	\$	\$200.00
All other situations. ....		\$200		
26. <input checked="" type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....		\$100		
International Search Report prepared and provided to the Office .....		\$400		
All other situations. ....		\$500	\$	\$500.00
<b>TOTAL OF 24, 25 and 26 =</b>			\$	<b>\$1,000.00</b>
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.				
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)	RATE	
92 - 100 =	0 /50 =	0	x	\$250.00
Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492(e)).				
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	
Total claims	19 - 20 =	0	x	\$50.00
Independent claims	1 - 3 =	0	x	\$200.00
MULTIPLE DEPENDENT CLAIMS (if applicable) <input checked="" type="checkbox"/>		+ \$360.00	\$	\$360.00
<b>TOTAL OF ABOVE CALCULATIONS =</b>			\$	<b>\$1,360.00</b>
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				
<b>SUBTOTAL =</b>				
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				
<b>TOTAL NATIONAL FEE =</b>			\$	<b>\$680.00</b>
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +				
<b>TOTAL FEES ENCLOSED =</b>			\$	<b>\$680.00</b>
			<b>Amount to be</b>	\$
			<b>Amount to be</b>	\$
a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed.				
b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees. A duplicate copy of this sheet is enclosed.				
c. <input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>02-2275</u> . A duplicate copy of this sheet is enclosed.				
d. <input checked="" type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.				
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.				
SEND ALL CORRESPONDENCE TO:				
Michael N. Mercanti				
LUCAS & MERCANTI, LLP				
475 Park Avenue South				
New York, New York 10016				
Phone: 212-661-8000				
Fax: 212-661-8002				
SIGNATURE				
Michael N. Mercanti				
NAME				
33,966				
REGISTRATION NUMBER				

10/551508  
JC12 Rec'd PCT/PTC 29 SEP 2005

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): KIM, Young Tae, et al.

Docket No.

428.1056

Application No.  
**To be assigned**

Filing Date  
**Herewith**

Examiner  
**Unknown**

Customer No.  
**20311**

Group Art Unit  
**Unknown**

Invention: **GENE INVOLVED IN THE BIOSYNTHESIS OF CAROTENOID AND MARINE MICROORGANISM,  
PARACOCCUS HAEUNDAENSIS, PRODUCING THE CAROTENOID**

I hereby certify that the following correspondence:

**Form PTO-1390 (2 pages, page 2 in duplicate)**

*(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 29, 2005 *(Date)*

**Carla Santos**

*(Typed or Printed Name of Person Mailing Correspondence)*

*(Signature of Person Mailing Correspondence)*

**EV 733 807 363 US**

*("Express Mail" Mailing Label Number)*

**Note: Each paper must have its own certificate of mailing.**